

**REMARKS**

Reconsideration and allowance of the subject application are respectfully requested in light of the following remarks. Claims 22-24 are pending in this application. By this Request, no claims are added, cancelled, or amended. Claim 22 is the sole independent claim.

**Request for Examiner Interview**

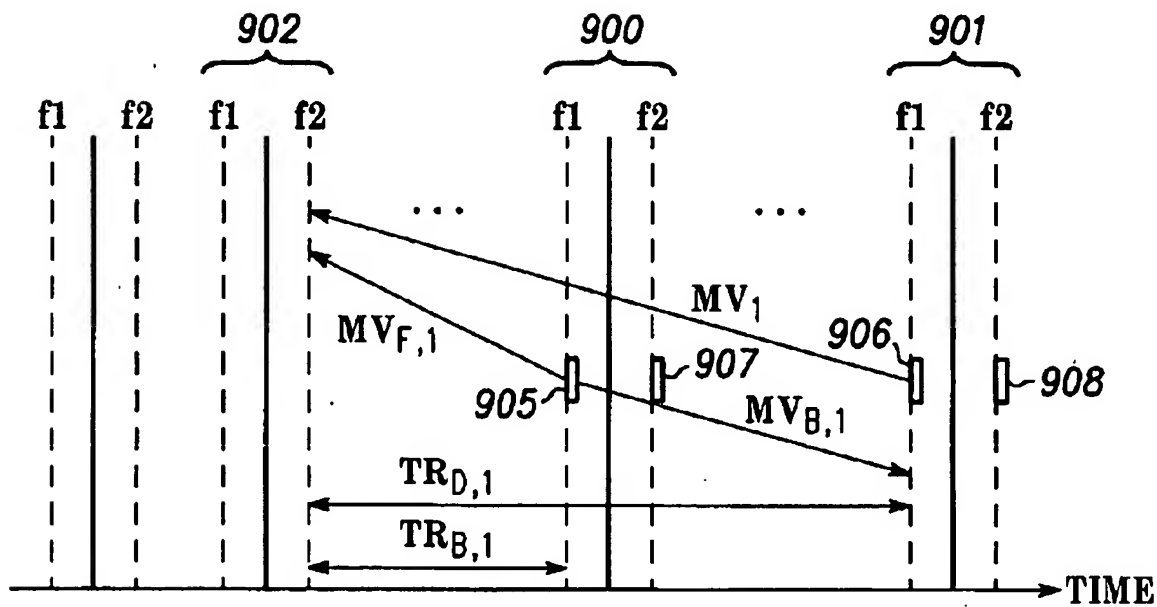
Applicants respectfully request the Examiner to conduct an Interview based on this Request for Reconsideration before the Examiner issues a next USPTO communication. The Examiner is requested to call Jared Scholz at 703-668-8006 to schedule a date and time for the interview.

**Rejections under 35 U.S.C. § 102**

The Examiner rejects claims 22-24 under 35 U.S.C. § 102 as being anticipated by Wang et al. (U.S. Patent Publication No. 2005/0117649, hereinafter "Wang"). Applicants respectfully traverse this rejection for the reasons detailed below.

On page 4 of the Office Action, the Examiner continues to assert that FIGS. 7A, 7B and 10 of Wang disclose "wherein the determining step determines a field having a same parity as the current macroblock or a different parity from the current macroblock as a reference picture based upon reference picture index information, index information for the reference frame, and field parity of the current field macroblock" as recited in claim 22.

FIG. 10 of Wang is illustrated below.



**FIG. 10**

The Examiner indicates that because the co-located block 906 has the same parity as the block 905 in the current B picture 900, this portion of FIG. 10 allegedly discloses “wherein the determining step **determines a field having a same parity as the current macroblock**...based upon reference picture index information, index information for the reference frame, and field parity of the current field macroblock” as required by claim 22. Applicants disagree with the Examiner’s rationale. Claim 22 requires determining a reference picture for the current field macroblock, where a field having a same parity (or different parity) as the current macroblock is determined as the reference picture based upon reference picture index information, index information for the reference frame, and field parity of the current field macroblock. Wang simply does not *determine* a **reference picture**. Rather, Wang determines the *co-located block* for deriving the motion vector in direct mode – not finding the reference field picture. In other words, **there is no relationship between the co-located block in Wang and the reference field picture of claim 1**. However, even assuming for the sake of argument that the co-located block 906 somehow relates to

the reference field picture of claim 1, Wang does not determine a reference field picture according to claim 1.

For example, when looking at FIG. 10 of Wang, Applicants do not dispute that the co-located block 906 has the same parity as the block 905 in the current B picture 900. However, Wang does not disclose *how* the co-located block 906 is determined as a reference picture based upon reference picture index information, index information for the reference frame, and field parity of the current field macroblock. For instance, although paragraphs [0077] and [0078] of Wang state that the co-located block 906 is in a field of the same parity as the block 905, these paragraphs fail to state *how* the co-located block 906 is determined to be the reference picture based upon reference picture index information, index information for the reference frame, and field parity of the current field macroblock. In contrast, claim 1 requires that a reference field picture is determined **based on** reference picture index information, index information for the reference frame, and field parity of the current field macroblock. Wang does **not** make a determination that the co-located block 906 has the same parity as the block 905.

The Examiner points to FIGS. 7A and 7B of Wang as disclosing reference field numbers, which allegedly correspond to the “reference picture index information” of claim 22. Assuming for the sake of argument that the reference field numbers of Wang correspond to the reference picture index information of claim 22 (which Applicants do not agree for the reasons contained in the August 27, 2009 Amendment), the Examiner has not indicated any **correlation** between FIG. 10 of Wang and the reference field numbers of FIGS. 7A and 7B. In other words, the Examiner has **not** indicated *how* the co-located block (906) of FIG. 10 is determined to be the reference picture of block 905 based upon the reference field numbers of FIGS. 7A and 7B.

Furthermore, in contrast to the Examiner's assertions, paragraph [0069] of Wang does not disclose or suggest "wherein the determining step determines a field having...a **different parity** from the current macroblock as a reference picture based upon reference picture index information, index information for the reference frame, and field parity of the current field macroblock." Paragraph [0069] of Wang is recited below.

[0069] According to another embodiment of the present invention, a macroblock in a P picture can be skipped in AFF coding. If a macroblock is skipped, its data is not transmitted in the encoding of the picture. A skipped macroblock in a P picture is reconstructed by copying the co-located macroblock with motion compensation in the most recently coded I or P reference field of the same field parity. Another embodiment is that the skipped macroblock in the P picture is reconstructed by copying the co-located macroblock in the most recently coded reference field, which can be of a different field parity.

Although a skipped macroblock may be of different field parity than the co-located macroblock, this paragraph of Wang does not discuss *how* the co-located block with different parity from the skipped macroblock is determined based upon (1) reference picture index information, (2) index information for the reference frame, and (3) field parity of the current field macroblock. Rather, Wang only states that it *may* be different without an explanation on whether that determination is based on reference picture index information, index information for the reference frame, and field parity of the current field macroblock. The Examiner appears to disregard the "based upon reference picture index information, index information for the reference frame, and field parity of the current field macroblock" language of claim 22.

Also, paragraph [0103] of Wang does **not** disclose or suggest "wherein if the reference picture index information is an odd index number, then the determined field has a field parity different from the current field macroblock" of claim 22. Paragraph [0103] of Wang discusses **temporal distances** between pictures – **not** determining a

reference picture to be of a different parity from the current field macroblock if the reference picture index information is an odd index number. For example, the temporal distance of Wang may be calculated using a variable, temporal reference (TR). Wang goes on to state “if a frame with frame index  $n$  is encoded in frame mode, the TR of this frame is  $2n$ ...and if a frame with frame index  $n$  is encoded in field mode, the TR of the first field of this frame is  $2n$  and the TR of the second field is  $2n+1$ .” First, the TR of a frame is not “reference picture index information” because the TR of Wang relates to **temporal distances** between reference pictures. Therefore, regardless of the value of the TR being either odd or even, calculating temporal distances is not relevant to the above-identified features of claim 22. As a result, Wang cannot possible disclose or suggest the features of claim 22. Therefore, Wang cannot anticipate or render claim 22 obvious to one of ordinary skill in the art. Claims 23-24, dependent on claim 22, are patentable for at least the same reasons.

**CONCLUSION**

Accordingly, in view of the above remarks, reconsideration of the objections and rejections and allowance of each of the pending claims in connection with the present application is earnestly solicited.

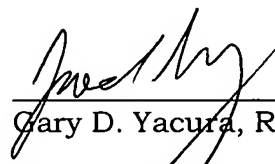
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKY, & PIERCE, P.L.C.

By



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